

Supplementary Table 1: Zircon data table for concordant zircon analyses used in the production of relative probability plots.

Spot	Concentration (ppm)			Ratios						Ages						% Discordance
	[U]	[Th]	U/Th	<sup>206</sup> Pb/ <sup>238</sup> U	2% SD	<sup>207</sup> Pb/ <sup>235</sup> U	2% SD	<sup>207</sup> Pb/ <sup>206</sup> Pb	2% SD	<sup>206</sup> Pb/ <sup>238</sup> U	± 2σ	<sup>207</sup> Pb/ <sup>235</sup> U	± 2σ	<sup>207</sup> Pb/ <sup>206</sup> Pb	± 2σ	
<b>Beavers Bend Tuff</b>																
2010-6.1	82	57	1.45	0.241866	2.236	3.153136	3.017	0.094758	2.173	1396.4	28.1	1445.8	23.3	1523.3	41.0	9.1
2010-6.2	31	26	1.22	0.213913	2.344	2.437265	3.525	0.082975	3.125	1249.6	26.6	1253.7	25.4	1268.6	61.0	1.5
2010-6.3	230	91	2.53	0.170067	2.050	1.770723	2.748	0.074604	1.781	1012.5	19.2	1034.8	17.8	1057.8	35.9	4.5
2010-6.5	668	205	3.26	0.194560	2.178	2.148584	2.599	0.080663	1.601	1146.0	22.9	1164.6	18.0	1213.2	31.5	5.9
2010-6.6	391	106	3.67	0.161827	2.524	1.617413	2.643	0.072727	1.411	966.9	22.7	977.0	16.6	1006.4	28.6	4.1
2010-6.7	359	52	6.91	0.227542	3.129	2.709214	3.654	0.086631	1.438	1321.6	37.4	1331.0	27.1	1352.3	27.7	2.3
2010-6.8	39	10	3.84	0.183139	2.275	1.938784	3.352	0.077623	2.478	1084.1	22.7	1094.6	22.5	1137.2	49.3	4.9
2010-6.11	206	63	3.29	0.169138	2.149	1.860124	3.517	0.078815	2.832	1007.4	20.0	1067.0	23.2	1167.5	56.1	15.9
2010-6.12	178	269	0.66	0.241230	3.227	3.073814	3.097	0.093305	2.301	1393.1	40.4	1426.2	23.7	1494.1	43.5	7.2
2010-6.13	134	63	2.12	0.235150	2.502	2.772395	2.356	0.085628	1.758	1361.4	30.7	1348.1	17.6	1329.8	34.0	-2.3
2010-6.14	525	532	0.99	0.050849	2.680	0.375442	2.561	0.053349	1.755	319.7	8.4	323.7	7.1	343.7	39.7	7.5
2010-6.16	565	411	1.37	0.051635	2.414	0.391384	2.198	0.054738	2.003	324.6	7.6	335.4	6.3	401.5	44.9	23.7
2010-6.18	259	172	1.51	0.049533	2.881	0.371028	3.291	0.054101	2.981	311.7	8.8	320.4	9.0	375.3	67.1	20.4
2010-6.20	300	196	1.53	0.266741	2.658	3.404681	2.498	0.093265	1.722	1524.2	36.1	1505.5	19.6	1493.3	32.6	-2.0
2010-6.23	391	108	3.63	0.217445	2.928	2.445024	2.527	0.082037	1.397	1268.4	33.7	1256.0	18.2	1246.4	27.4	-1.7
2010-6.24	434	237	1.83	0.053698	2.604	0.397086	2.480	0.053964	1.909	337.2	8.6	339.5	7.2	369.5	43.0	9.6
2010-6.25	617	82	7.50	0.186410	2.290	1.998376	2.545	0.078182	1.998	1101.9	23.2	1115.0	17.2	1151.5	39.7	4.5
2010-6.26	410	57	7.16	0.192145	2.360	1.999604	2.396	0.074916	1.374	1133.0	24.5	1115.4	16.2	1066.2	27.6	-5.9
2010-6.27	295	208	1.42	0.073890	2.517	0.581357	2.703	0.056936	1.648	459.5	11.2	465.3	10.1	489.1	36.4	6.4
2010-6.28	536	394	1.36	0.050828	2.020	0.373044	2.344	0.052878	1.497	319.6	6.3	321.9	6.5	323.6	34.0	1.2
2010-6.29	395	161	2.46	0.163389	2.334	1.587588	2.403	0.071115	1.339	975.6	21.1	965.4	15.0	960.7	27.4	-1.5
2010-6.30	368	208	1.77	0.216170	1.765	2.594638	1.842	0.086101	1.329	1261.6	20.2	1299.1	13.5	1340.4	25.7	6.2
2010-6.31	772	856	0.90	0.053631	2.621	0.406057	2.669	0.054565	1.582	336.8	8.6	346.0	7.8	394.4	35.5	17.1
2010-6.33	214	89	2.41	0.053541	2.043	0.404948	2.852	0.054697	2.274	336.2	6.7	345.2	8.3	399.8	51.0	18.9
2010-6.34	64	64	1.00	0.232220	1.828	2.843487	1.814	0.088915	1.871	1346.1	22.2	1367.1	13.6	1402.3	35.8	4.2
2010-6.35	58	28	2.06	0.169040	2.257	1.755865	2.666	0.076449	2.212	1006.8	21.0	1029.3	17.2	1106.8	44.2	9.9
2010-6.36	395	411	0.96	0.072977	2.282	0.561923	2.232	0.056006	1.751	454.1	10.0	452.8	8.2	452.6	38.9	-0.3
2010-6.38	83	21	3.84	0.154734	2.391	1.501094	2.486	0.069998	2.044	927.4	20.7	930.8	15.1	928.3	42.0	0.1
2010-6.39	206	87	2.36	0.261648	2.153	3.263127	2.114	0.090254	1.459	1498.3	28.8	1472.3	16.4	1430.9	27.8	-4.5
2010-6.41	329	197	1.67	0.052365	2.954	0.384089	2.870	0.053099	2.029	329.0	9.5	330.0	8.1	333.0	46.0	1.2
2010-6.42	182	53	3.46	0.167053	2.475	1.679932	2.329	0.072544	1.676	995.9	22.8	1001.0	14.8	1001.3	34.0	0.5
2010-6.43	735	302	2.43	0.055714	2.884	0.404215	3.016	0.052682	1.814	349.5	9.8	344.7	8.8	315.1	41.3	-9.8
2010-6.44	2170	276	7.86	0.174146	2.516	1.785604	2.266	0.074466	1.710	1034.9	24.1	1040.2	14.8	1054.1	34.4	1.9
2010-6.45	1212	240	5.05	0.201636	3.066	2.224654	2.808	0.080779	1.714	1184.1	33.2	1188.8	19.7	1216.1	33.7	2.7
2010-6.46	176	98	1.80	0.184763	2.375	1.954919	2.134	0.075834	2.009	1092.9	23.9	1100.1	14.3	1090.7	40.2	-0.2
2010-6.47	413	167	2.48	0.204175	2.793	2.290374	2.438	0.081444	1.800	1197.7	30.5	1209.3	17.2	1232.2	35.3	2.9
2010-6.48	205	55	3.70	0.185572	2.470	1.980107	2.069	0.076875	1.914	1097.3	24.9	1108.8	14.0	1118.0	38.2	1.9
2010-6.49	88	102	0.87	0.232718	2.517	2.854300	2.613	0.087854	2.114	1348.7	30.6	1369.9	19.6	1379.3	40.6	2.3
2010-6.52	375	248	1.52	0.054005	2.858	0.404864	2.995	0.053385	2.112	339.1	9.4	345.2	8.8	345.2	47.8	1.8
2010-6.53	207	63	3.30	0.158298	2.133	1.633691	1.893	0.074704	1.914	947.3	18.8	983.3	11.9	1060.5	38.5	12.0
2010-6.54	113	50	2.24	0.170454	2.617	1.742129	2.236	0.074149	1.966	1014.6	24.6	1024.3	14.4	1045.5	39.6	3.0
2010-6.55	55	38	1.46	0.251325	2.602	3.141125	2.420	0.090371	2.069	1445.3	33.7	1442.8	18.6	1433.4	39.5	-0.8
2010-6.56	230	151	1.53	0.192195	9.457	2.393452	11.308	0.090356	3.808	1133.3	98.3	1240.6	81.2	1433.1	72.7	26.5
2010-6.57	327	198	1.65	0.052868	3.110	0.391860	3.067	0.054181	2.239	332.1	10.1	335.7	8.8	378.6	50.4	14.0
2010-6.58	470	304	1.55	0.052781	2.834	0.379660	2.832	0.052655	2.287	331.6	9.2	326.8	7.9	314.0	52.0	-5.3
2010-6.59	29	38	0.78	0.248884	2.870	3.194697	2.853	0.091662	2.282	1432.7	36.9	1455.9	22.1	1460.4	43.4	1.9
2010-6.61	550	361	1.52	0.053134	3.471	0.407421	3.138	0.054691	2.228	333.7	11.3	347.0	9.2	399.6	49.9	19.7
2010-6.63	1544	137	11.29	0.152901	3.347	1.600893	2.488	0.075392	1.920	917.2	28.6	970.6	15.6	1079.0	38.5	17.6
2010-6.64	161	64	2.52	0.167525	3.390	1.694713	2.689	0.072354	2.411	998.5	31.4	1006.5	17.2	995.9	49.0	-0.3
2010-6.66	115	40	2.86	0.172820	2.354	1.767762	2.503	0.074441	1.883	1027.6	22.4	1033.7	16.2	1053.5	37.9	2.5
2010-6.68	763	606	1.26	0.051151	2.500	0.377196	2.552	0.053372	1.745	321.6	7.8	325.0	7.1	344.7	39.5	7.2

Spot	Concentration (ppm)			Ratios						Ages						% Discordance
	[U]	[Th]	U/Th	<sup>206</sup> Pb/ <sup>238</sup> U	2% SD	<sup>207</sup> Pb/ <sup>235</sup> U	2% SD	<sup>207</sup> Pb/ <sup>206</sup> Pb	2% SD	<sup>206</sup> Pb/ <sup>238</sup> U	± 2σ	<sup>207</sup> Pb/ <sup>235</sup> U	± 2σ	<sup>207</sup> Pb/ <sup>206</sup> Pb	± 2σ	
2010-6.69	155	57	2.69	0.166559	2.774	1.737302	3.288	0.076776	2.692	993.1	25.5	1022.5	21.2	1115.4	53.7	12.3
2010-6.70	233	162	1.44	0.238673	2.558	3.001995	2.025	0.090819	1.500	1379.8	31.8	1408.1	15.4	1442.8	28.6	4.6
2010-6.71	976	798	1.22	0.051194	2.498	0.376628	2.201	0.053893	1.698	321.8	7.8	324.6	6.1	366.6	38.3	13.9
2010-6.72	1316	424	3.11	0.175258	3.076	1.833708	2.208	0.075572	1.658	1041.0	29.6	1057.6	14.5	1083.8	33.2	4.1
2010-6.75	118	60	1.96	0.381168	2.156	6.685898	2.047	0.126698	1.643	2081.7	38.3	2070.8	18.1	2052.7	29.0	-1.4
2010-6.77	526	444	1.18	0.054982	2.726	0.401639	2.663	0.053804	2.460	345.0	9.2	342.8	7.7	362.8	55.5	5.2
2010-6.79	873	250	3.50	0.077021	3.576	0.587274	3.419	0.056187	2.179	478.3	16.5	469.1	12.8	459.7	48.3	-3.9
2010-6.80	960	299	3.21	0.171490	2.697	1.775734	2.296	0.074803	1.906	1020.3	25.5	1036.6	14.9	1063.2	38.3	4.2
2010-6.82	305	137	2.23	0.267757	3.376	3.755505	2.975	0.101733	2.335	1529.4	46.0	1583.3	23.9	1656.0	43.3	8.3
2010-6.86	450	291	1.55	0.051342	2.760	0.373339	2.645	0.052779	1.792	322.8	8.7	322.1	7.3	319.3	40.7	-1.1
2010-6.88	1370	987	1.39	0.051583	2.503	0.379517	2.262	0.053053	1.370	324.2	7.9	326.7	6.3	331.0	31.1	2.1
2010-6.89	514	340	1.51	0.051868	2.820	0.392668	3.173	0.055228	2.171	326.0	9.0	336.3	9.1	421.5	48.5	29.3
2010-6.90	431	301	1.43	0.485667	2.393	11.209259	2.194	0.165643	1.147	2551.9	50.4	2540.7	20.5	2514.1	19.3	-1.5
2010-6.91	1006	850	1.18	0.052873	3.247	0.396300	3.749	0.054212	2.233	332.1	10.5	339.0	10.8	379.9	50.2	14.4
2010-6.94	290	137	2.12	0.053441	2.885	0.402266	3.651	0.054463	2.364	335.6	9.4	343.3	10.6	390.2	53.1	16.3
2010-6.95	542	197	2.75	0.173690	2.789	1.840195	2.792	0.077025	1.677	1032.4	26.6	1059.9	18.4	1121.8	33.4	8.7
2010-6.98	326	190	1.72	0.205478	2.461	2.224869	2.497	0.078963	1.504	1204.7	27.0	1188.9	17.5	1171.2	29.8	-2.8
2010-6.99	40	11	3.65	0.167334	2.412	1.685811	2.894	0.073682	2.300	997.4	22.3	1003.2	18.4	1032.8	46.5	3.5
2010-6.100	103	56	1.83	0.228133	2.224	2.756392	2.318	0.087299	1.688	1324.7	26.6	1343.8	17.3	1367.1	32.5	3.2
2010-6.101	211	131	1.61	0.240530	2.936	2.904615	2.430	0.087938	1.935	1389.5	36.7	1383.1	18.4	1381.1	37.2	-0.6
2010-6.102	227	342	0.66	0.171522	3.128	1.862283	3.408	0.079631	2.528	1020.5	29.5	1067.8	22.5	1187.9	49.9	16.4
2010-6.104	392	306	1.28	0.052598	3.085	0.393300	2.796	0.054106	2.172	330.5	9.9	336.8	8.0	375.5	48.9	13.6
2010-6.106	350	219	1.59	0.052184	2.686	0.383964	2.590	0.053580	2.211	327.9	8.6	330.0	7.3	353.5	50.0	7.8
2010-6.107	123	101	1.22	0.194770	2.342	2.147184	1.939	0.079183	1.866	1147.2	24.6	1164.1	13.4	1176.7	36.9	2.6
2010-6.108	475	180	2.64	0.156798	2.384	1.661389	2.362	0.074835	2.092	939.0	20.8	993.9	15.0	1064.1	42.1	13.3
2010-6.109	298	209	1.43	0.274034	2.217	3.952283	1.947	0.104792	1.683	1561.2	30.7	1624.5	15.8	1710.7	31.0	9.6
2010-6.110	143	81	1.77	0.242457	2.570	3.130442	2.189	0.093245	1.685	1399.5	32.3	1440.2	16.8	1492.9	31.9	6.7
2010-6.112	266	81	3.27	0.169840	2.460	1.774810	2.751	0.074798	1.640	1011.2	23.0	1036.3	17.9	1063.1	33.0	5.1
2010-6.113	617	485	1.27	0.052158	2.974	0.381555	3.132	0.052448	1.743	327.8	9.5	328.2	8.8	305.0	39.7	-6.9
2010-6.115	254	158	1.60	0.258727	2.537	3.555772	2.614	0.097008	1.553	1483.3	33.6	1539.7	20.7	1567.4	29.1	5.7
2010-6.116	155	70	2.22	0.219518	2.666	2.628770	3.483	0.085282	1.540	1279.3	30.9	1308.7	25.6	1322.0	29.8	3.3
2010-6.117	220	91	2.42	0.188670	2.380	2.187991	3.355	0.083079	1.774	1114.2	24.4	1177.2	23.4	1271.1	34.6	14.1
2010-6.119	181	105	1.73	0.149718	2.519	1.563148	3.429	0.074257	1.626	899.4	21.1	955.7	21.2	1048.5	32.8	16.6

### Hatton Tuff

2010-5.1	314	119	2.64	0.101392	2.162	0.862925	2.329	0.061945	1.602	622.6	12.8	631.7	11.0	672.2	34.3	8.0
2010-5.2	391	128	3.05	0.320820	2.603	4.807943	2.737	0.108090	1.265	1793.7	40.8	1786.3	23.0	1767.5	23.1	-1.5
2010-5.3	392	74	5.30	0.169217	2.201	1.823368	2.511	0.078614	1.758	1007.8	20.5	1053.9	16.5	1162.4	34.8	15.3
2010-5.4	918	334	2.75	0.113632	2.611	0.992715	2.438	0.063408	1.417	693.8	17.2	700.1	12.3	721.9	30.1	4.1
2010-5.5	123	97	1.26	0.212499	2.119	2.462101	2.168	0.083881	1.693	1242.1	23.9	1261.0	15.7	1289.8	33.0	3.8
2010-5.6	288	192	1.50	0.178008	2.756	1.832566	2.738	0.074690	1.558	1056.1	26.8	1057.2	18.0	1060.2	31.3	0.4
2010-5.7	85	51	1.68	0.234029	2.039	2.876348	2.179	0.088358	1.590	1355.6	24.9	1375.7	16.4	1390.3	30.5	2.6
2010-5.8	204	100	2.04	0.252447	1.974	3.147792	1.854	0.090511	1.490	1451.1	25.7	1444.5	14.3	1436.3	28.4	-1.0
2010-5.12	473	344	1.38	0.500639	2.042	12.128754	2.066	0.175812	1.386	2616.5	43.9	2614.4	19.4	2613.8	23.1	-0.1
2010-5.13	571	460	1.24	0.211060	2.030	2.350714	1.876	0.081189	1.564	1234.5	22.8	1227.8	13.4	1226.0	30.7	-0.7
2010-5.15	202	179	1.13	0.240549	2.166	2.999853	2.159	0.090276	1.488	1389.5	27.1	1407.6	16.4	1431.4	28.4	3.0
2010-5.16	350	188	1.86	0.255543	2.615	3.186441	2.457	0.090751	2.062	1467.0	34.3	1453.9	19.0	1441.4	39.3	-1.7
2010-5.18	472	324	1.46	0.052620	2.664	0.400815	2.689	0.055273	2.320	330.6	8.6	342.2	7.8	423.3	51.8	28.0
2010-5.19	272	100	2.73	0.203806	2.475	2.202606	2.435	0.078350	2.218	1195.7	27.0	1181.9	17.0	1155.8	44.0	-3.3
2010-5.21	326	419	0.78	0.252900	2.724	3.198416	2.846	0.091865	1.559	1453.4	35.4	1456.8	22.0	1464.6	29.6	0.8
2010-5.22	359	218	1.65	0.052017	2.400	0.382664	2.812	0.054408	2.027	326.9	7.6	329.0	7.9	388.0	45.5	18.7
2010.5.23	963	67	14.29	0.162373	2.784	1.630298	2.894	0.072379	1.511	970.0	25.1	982.0	18.2	996.6	30.7	2.8
2010-5.26	389	229	1.70	0.053165	2.551	0.391366	2.957	0.053792	2.122	333.9	8.3	335.4	8.4	362.4	47.9	8.5
2010-5.27	333	265	1.26	0.104866	2.736	0.910369	2.914	0.063559	1.825	642.9	16.7	657.3	14.1	727.0	38.7	13.1
2010-5.28	412	282	1.46	0.052214	2.288	0.391221	2.375	0.054474	1.823	328.1	7.3	335.3	6.8	390.7	40.9	19.1

Spot	Concentration (ppm)			Ratios						Ages						% Discordance
	[U]	[Th]	U/Th	<sup>206</sup> Pb/ <sup>238</sup> U	2% SD	<sup>207</sup> Pb/ <sup>235</sup> U	2% SD	<sup>207</sup> Pb/ <sup>206</sup> Pb	2% SD	<sup>206</sup> Pb/ <sup>238</sup> U	± 2σ	<sup>207</sup> Pb/ <sup>235</sup> U	± 2σ	<sup>207</sup> Pb/ <sup>206</sup> Pb	± 2σ	
2010-5.30	496	320	1.55	0.053399	2.500	0.397502	2.673	0.054365	1.845	335.4	8.2	339.8	7.7	386.2	41.4	15.2
2010-5.37	391	219	1.78	0.055785	2.119	0.412644	2.411	0.053998	1.976	349.9	7.2	350.8	7.2	371.0	44.5	6.0
2010-5.39	183	63	2.91	0.244704	2.119	3.128493	2.018	0.091799	1.538	1411.1	26.9	1439.7	15.5	1463.2	29.2	3.7
2010-5.40	93	70	1.33	0.234402	1.986	2.803584	1.939	0.087459	1.481	1357.5	24.3	1356.5	14.5	1370.6	28.5	1.0
2010-5.41	180	79	2.27	0.236942	2.159	2.847253	2.258	0.086895	1.376	1370.8	26.7	1368.1	17.0	1358.2	26.5	-0.9
2010-5.42	192	78	2.45	0.168396	1.984	1.772652	2.149	0.076392	1.729	1003.3	18.4	1035.5	14.0	1105.4	34.6	10.2
2010-5.43	80	24	3.32	0.184959	2.310	1.984294	2.830	0.077365	1.707	1094.0	23.2	1110.2	19.1	1130.6	34.0	3.3
2010-5.44	243	86	2.82	0.259628	2.054	3.258483	2.145	0.091133	1.309	1487.9	27.3	1471.2	16.7	1449.4	24.9	-2.6
2010-5.47	80	31	2.54	0.213240	2.688	2.567513	2.815	0.086574	2.025	1246.1	30.5	1291.4	20.6	1351.0	39.1	8.4
2010-5.48	394	200	1.97	0.245528	2.267	3.097054	2.362	0.093046	1.449	1415.4	28.8	1432.0	18.1	1488.8	27.4	5.2
2010-5.49	79	39	2.01	0.100372	2.357	0.890615	3.512	0.063540	2.916	616.6	13.9	646.7	16.8	726.3	61.8	17.8
2010-5.50	828	243	3.40	0.201330	2.516	2.229786	2.274	0.079545	1.307	1182.5	27.2	1190.5	15.9	1185.7	25.8	0.3
2010-5.51	425	156	2.72	0.198257	2.220	2.476649	1.854	0.091081	2.111	1165.9	23.7	1265.2	13.4	1448.3	40.2	24.2
2010-5.53	249	218	1.14	0.253766	1.890	3.226480	1.578	0.091893	1.717	1457.9	24.7	1463.5	12.2	1465.2	32.6	0.5
2010-5.54	496	257	1.93	0.236660	1.981	3.149523	1.767	0.095504	1.639	1369.3	24.4	1444.9	13.6	1538.0	30.8	12.3
2010-5.55	69	78	0.89	0.233813	2.286	2.839667	2.152	0.088521	2.074	1354.5	27.9	1366.1	16.2	1393.8	39.8	2.9
2010-5.59	65	58	1.12	0.160521	2.497	1.665682	2.643	0.075443	2.935	959.7	22.3	995.5	16.8	1080.3	58.9	12.6
2010-5.61	311	197	1.58	0.214095	1.911	2.372387	1.893	0.080425	1.542	1250.6	21.7	1234.3	13.5	1207.4	30.4	-3.5
2010-5.62	735	79	9.31	0.068597	2.202	0.527634	2.101	0.056546	1.786	427.7	9.1	430.2	7.4	473.9	39.5	10.8
2010-5.63	165	55	2.98	0.217624	1.984	2.489598	1.945	0.082580	1.571	1269.3	22.9	1269.0	14.1	1259.3	30.7	-0.8
2010-5.65	219	73	3.02	0.225532	2.485	2.656538	2.449	0.084889	1.463	1311.0	29.5	1316.5	18.1	1313.0	28.4	0.2
2010-5.66	405	128	3.15	0.260619	2.192	3.279958	1.916	0.091094	1.302	1493.0	29.2	1476.3	14.9	1448.6	24.8	-3.0
2010-5.68	102	61	1.66	0.280786	2.267	3.994130	2.043	0.102093	1.533	1595.3	32.0	1633.0	16.6	1662.5	28.4	4.2
2010-5.70	559	151	3.69	0.191040	2.447	2.080638	2.369	0.078597	1.344	1127.0	25.3	1142.4	16.3	1162.0	26.6	3.1
2010-5.71	53	53	0.99	0.247925	2.509	3.150010	3.099	0.091571	2.198	1427.8	32.1	1445.0	23.9	1458.5	41.8	2.2
2010-5.72	217	48	4.55	0.324937	2.562	4.983615	3.038	0.110128	1.355	1813.8	40.5	1816.5	25.7	1801.5	24.6	-0.7
2010-5.73	194	50	3.83	0.206707	2.709	2.276167	2.683	0.079861	1.535	1211.2	29.9	1204.9	18.9	1193.5	30.3	-1.5
2010-5.74	348	188	1.85	0.051559	2.432	0.386477	2.733	0.054324	2.010	324.1	7.7	331.8	7.7	384.5	45.1	18.6
2010-5.75	411	231	1.78	0.051407	2.296	0.376509	2.654	0.053265	2.248	323.2	7.2	324.5	7.4	340.1	50.9	5.2
2010-5.76	371	305	1.22	0.072142	2.868	0.595986	2.241	0.059098	2.605	449.0	12.4	474.7	8.5	570.7	56.7	27.1
2010-5.77	221	129	1.71	0.210029	2.323	2.432676	1.904	0.083983	1.650	1229.0	26.0	1252.3	13.7	1292.2	32.1	5.1
2010-5.78	268	103	2.60	0.195970	3.090	2.198588	2.427	0.080795	1.699	1153.6	32.6	1180.6	16.9	1216.5	33.4	5.4
2010-5.79	131	72	1.81	0.129799	2.620	1.213695	2.353	0.067578	1.886	786.7	19.4	806.9	13.1	855.6	39.2	8.8
2010-5.80	580	216	2.69	0.180900	3.004	2.060969	2.357	0.081933	1.598	1071.9	29.7	1135.9	16.1	1243.9	31.3	16.0
2010-5.81	341	68	5.04	0.230984	2.333	2.790210	2.202	0.085790	1.514	1339.7	28.2	1352.9	16.5	1333.4	29.3	-0.5
2010-5.83	390	201	1.94	0.050216	2.308	0.379659	2.356	0.054723	1.969	315.8	7.1	326.8	6.6	400.9	44.1	26.9
2010-5.85	369	187	1.97	0.050869	2.344	0.380703	2.476	0.053635	2.167	319.9	7.3	327.6	6.9	355.8	48.9	11.2
2010-5.86	355	204	1.74	0.051073	2.333	0.386148	2.453	0.054443	1.793	321.1	7.3	331.6	6.9	389.4	40.2	21.3
2010-5.87	161	73	2.21	0.221642	2.020	2.742028	1.992	0.088923	1.555	1290.5	23.6	1339.9	14.8	1402.5	29.8	8.7
2010-5.88	849	457	1.86	0.219369	2.027	2.635368	2.081	0.086339	1.316	1278.5	23.5	1310.6	15.3	1345.8	25.4	5.3
2010-5.90	135	74	1.83	0.203868	1.901	2.318711	1.942	0.082646	1.664	1196.1	20.8	1218.0	13.8	1260.9	32.5	5.4
2010-5.92	172	116	1.48	0.183074	2.119	1.918203	2.107	0.074735	1.468	1083.7	21.1	1087.4	14.1	1061.4	29.5	-2.1
2010-5.93	377	207	1.82	0.051267	2.379	0.388346	2.447	0.054557	2.162	322.3	7.5	333.2	7.0	394.1	48.5	22.3
2010-5.94	472	368	1.28	0.072390	2.111	0.583928	1.990	0.057906	1.482	450.5	9.2	467.0	7.5	526.2	32.5	16.8
2010-5.95	23	23	1.00	0.533565	2.220	13.477926	2.386	0.183443	1.515	2756.5	49.8	2713.7	22.6	2684.2	25.1	-2.6
2010-5.96	381	207	1.84	0.052661	2.275	0.386671	2.350	0.053641	1.949	330.8	7.3	331.9	6.7	356.0	44.0	7.6
2010-5.97	628	567	1.11	0.053228	2.421	0.396715	2.760	0.053702	1.810	334.3	7.9	339.3	8.0	358.6	40.8	7.3
2010-5.98	416	261	1.59	0.053811	2.333	0.403837	2.461	0.053943	1.979	337.9	7.7	344.4	7.2	368.7	44.6	9.1
2010-5.99	233	158	1.48	0.237446	2.211	2.873978	2.215	0.087529	1.501	1373.4	27.4	1375.1	16.7	1372.2	28.9	-0.1
2010-5.100	348	181	1.92	0.053690	2.377	0.415187	2.942	0.055525	2.090	337.1	7.8	352.6	8.8	433.4	46.5	28.6
2010-5.101	229	87	2.62	0.073160	2.399	0.578762	2.685	0.056926	1.689	455.2	10.5	463.7	10.0	488.7	37.3	7.4
2010-5.103	534	341	1.56	0.208478	2.960	2.316255	2.959	0.079323	1.112	1220.7	32.9	1217.3	21.0	1180.2	22.0	-3.3
2010-5.104	412	256	1.61	0.054691	2.899	0.400160	2.937	0.053157	2.033	343.3	9.7	341.8	8.5	335.5	46.1	-2.3
2010-5.105	758	186	4.07	0.252318	2.323	3.161055	2.305	0.090324	1.252	1450.4	30.2	1447.7	17.8	1432.4	23.9	-1.2

Spot	Concentration (ppm)			Ratios						Ages						% Discordance
	[U]	[Th]	U/Th	<sup>206</sup> Pb/ <sup>238</sup> U	2% SD	<sup>207</sup> Pb/ <sup>235</sup> U	2% SD	<sup>207</sup> Pb/ <sup>206</sup> Pb	2% SD	<sup>206</sup> Pb/ <sup>238</sup> U	± 2σ	<sup>207</sup> Pb/ <sup>235</sup> U	± 2σ	<sup>207</sup> Pb/ <sup>206</sup> Pb	± 2σ	
2010-5.106	275	138	1.99	0.260961	2.259	3.318959	2.525	0.090636	1.321	1494.8	30.1	1485.5	19.7	1439.0	25.2	-3.7
2010-5.107	941	343	2.74	0.155044	3.204	1.636048	3.061	0.076868	1.321	929.2	27.7	984.2	19.3	1117.8	26.3	20.3
2010-5.108	160	99	1.62	0.277385	1.984	3.746980	2.140	0.097490	1.419	1578.2	27.8	1581.5	17.2	1576.7	26.6	-0.1
2010-5.109	194	186	1.04	0.077039	2.806	0.623996	3.834	0.057811	2.486	478.4	12.9	492.3	15.0	522.6	54.5	9.2
2010-5.110	1161	243	4.77	0.178389	2.222	1.963779	2.190	0.079937	1.301	1058.2	21.7	1103.2	14.7	1195.4	25.7	13.0
2010-5.111	420	236	1.78	0.050343	2.253	0.379055	4.475	0.054848	3.135	316.6	7.0	326.3	12.5	406.0	70.2	28.2
2010-5.112	464	59	7.85	0.241397	3.509	2.772031	5.506	0.082316	2.931	1394.0	44.0	1348.0	41.1	1253.1	57.3	-10.1
2010-5.113	898	146	6.15	0.381075	1.948	6.769113	3.700	0.128367	2.611	2081.3	34.6	2081.7	32.7	2075.7	46.0	-0.3
2010-5.114	384	102	3.78	0.193566	2.540	2.331443	3.888	0.086745	2.783	1140.7	26.6	1221.9	27.6	1354.8	53.7	18.8
2010-5.116	377	114	3.29	0.167462	2.360	1.714221	7.250	0.073369	5.856	998.1	21.8	1013.9	46.5	1024.2	118.5	2.6
2010-5.117	471	157	3.00	0.178581	2.608	2.074442	7.497	0.083589	5.902	1059.2	25.5	1140.4	51.4	1283.0	115.0	21.1
2010-5.118	178	56	3.19	0.173710	2.066	1.759046	7.301	0.073338	5.908	1032.5	19.7	1030.5	47.3	1023.3	119.6	-0.9
2010-5.119	488	281	1.74	0.052642	2.874	0.392112	7.645	0.054875	5.988	330.7	9.3	335.9	21.9	407.1	134.0	23.1
2010-5.120	377	145	2.60	0.204293	2.558	2.264554	7.325	0.080280	5.818	1198.3	28.0	1201.3	51.6	1203.9	114.6	0.5

Lower Mud Creek Tuff

2010-1.1	167	58	2.86	0.198515	2.629	1.713090	8.678	0.070124	6.182	1167.3	28.1	1013.4	55.7	932.0	126.9	-20.2
2010-1.2	168	78	2.14	0.166299	2.885	1.380169	8.671	0.067317	6.135	991.7	26.5	880.5	51.1	847.6	127.6	-14.5
2010-1.3	150	162	0.93	0.187748	3.377	1.639247	8.975	0.069351	6.218	1109.2	34.4	985.4	56.7	909.2	128.1	-18.0
2010-1.5	125	36	3.51	0.156250	3.004	1.346348	8.744	0.067620	6.253	935.9	26.2	866.0	51.0	856.9	129.8	-8.4
2010-1.8	526	367	1.43	0.050367	2.676	0.343270	8.640	0.052500	6.238	316.8	8.3	299.6	22.4	307.2	142.1	-3.0
2010-1.9	245	87	2.81	0.303143	2.492	3.635866	8.515	0.090999	6.035	1706.9	37.4	1557.4	67.9	1446.6	114.9	-15.2
2010-1.11	579	529	1.10	0.049843	2.695	0.347531	8.569	0.051150	6.205	313.6	8.2	302.9	22.4	247.6	142.9	-21.0
2010-1.12	487	277	1.76	0.050447	2.788	0.363902	8.820	0.052320	6.236	317.3	8.6	315.1	23.9	299.4	142.2	-5.6
2010-1.13	192	98	1.96	0.201670	2.761	1.938970	8.534	0.070517	6.066	1184.3	29.9	1094.6	57.2	943.5	124.3	-20.3
2010-1.14	446	264	1.69	0.049914	2.777	0.356937	8.710	0.052258	6.369	314.0	8.5	309.9	23.3	296.7	145.3	-5.5
2010-1.15	570	361	1.58	0.049816	5.315	0.366860	11.354	0.054403	6.224	313.4	16.3	317.3	31.0	387.8	139.8	23.7
2010-1.19	243	158	1.54	0.190071	3.183	1.820651	2.214	0.068162	3.518	1121.8	32.8	1052.9	14.5	873.5	72.9	-22.1
2010-1.20	579	333	1.73	0.050654	3.229	0.381401	3.679	0.053868	4.009	318.5	10.0	328.1	10.3	365.5	90.4	14.8
2010-1.21	469	272	1.72	0.050004	3.025	0.380438	2.694	0.053900	3.713	314.5	9.3	327.4	7.5	366.9	83.7	16.6
2010-1.22	433	240	1.81	0.050629	3.093	0.381891	2.661	0.053297	3.857	318.4	9.6	328.4	7.5	341.4	87.3	7.2
2010.1.23	876	889	0.99	0.053355	3.824	0.398472	2.921	0.052296	3.724	335.1	12.5	340.5	8.4	298.4	85.0	-10.9
2010-1.25	283	138	2.05	0.243361	2.598	2.664185	2.924	0.077661	2.300	1404.1	32.8	1318.6	21.6	1138.2	45.8	-18.9
2010-1.28	234	171	1.37	0.246572	3.459	2.895239	7.433	0.082882	4.868	1420.8	44.1	1380.7	56.2	1266.4	95.0	-10.9
2010-1.29	132	62	2.11	0.164512	3.298	1.594995	7.505	0.069354	5.016	981.8	30.0	968.3	46.9	909.3	103.3	-7.4
2010-1.30	194	111	1.76	0.196225	3.487	2.205132	9.819	0.078362	7.107	1155.0	36.9	1182.7	68.7	1156.1	141.0	0.1
2010-1.32	205	60	3.42	0.224519	3.244	2.444522	7.291	0.077046	4.905	1305.7	38.3	1255.8	52.6	1122.4	97.8	-14.0
2010-1.34	342	173	1.98	0.050542	3.505	0.388440	7.563	0.053948	5.268	317.8	10.9	333.2	21.5	368.9	118.7	16.1
2010-1.37	75	43	1.72	0.244452	3.834	2.891207	4.112	0.084529	2.122	1409.8	48.5	1379.6	31.0	1304.8	41.2	-7.5
2010-1.38	384	229	1.68	0.050594	3.875	0.384204	4.591	0.053406	2.264	318.2	12.0	330.1	12.9	346.1	51.2	8.8
2010-1.39	75	24	3.14	0.173605	4.106	1.885804	5.224	0.076655	3.127	1031.9	39.2	1076.1	34.7	1112.2	62.5	7.8
2010-1.40	487	384	1.27	0.051628	3.716	0.370830	4.162	0.051523	2.206	324.5	11.8	320.3	11.4	264.3	50.6	-18.5
2010-1.41	381	198	1.93	0.281748	3.728	3.339589	3.915	0.086016	1.355	1600.2	52.8	1490.4	30.6	1338.6	26.2	-16.3
2010-1.44	544	303	1.80	0.050669	3.797	0.361027	3.997	0.051568	2.373	318.6	11.8	313.0	10.8	266.3	54.5	-16.4
2010-1.45	205	76	2.68	0.240865	2.944	2.704764	3.181	0.080900	1.805	1391.2	36.8	1329.8	23.6	1219.0	35.5	-12.4
2010-1.46	288	139	2.07	0.233968	2.644	2.566665	2.189	0.078989	1.672	1355.3	32.3	1291.2	16.0	1171.9	33.1	-13.5
2010-1.47	285	194	1.47	0.072457	2.428	0.558562	3.225	0.055981	2.329	450.9	10.6	450.6	11.7	451.6	51.7	0.2
2010-1.51	256	140	1.83	0.249990	2.067	2.761664	2.489	0.080653	1.320	1438.4	26.7	1345.2	18.6	1213.0	26.0	-15.7
2010-1.52	402	206	1.95	0.052013	2.098	0.369856	2.741	0.051950	2.301	326.9	6.7	319.5	7.5	283.2	52.6	-13.4
2010-1.53	578	350	1.65	0.050984	2.270	0.354168	2.960	0.050673	2.410	320.6	7.1	307.9	7.9	226.0	55.7	-29.5
2010-1.58	275	140	1.97	0.243860	2.595	3.497021	2.119	0.105798	3.695	1406.7	32.8	1526.5	16.7	1728.2	67.8	22.9
2010-1.62	498	316	1.58	0.049747	3.304	0.366806	3.177	0.053945	4.306	313.0	10.1	317.3	8.7	368.7	97.0	17.8
2010-1.63	455	242	1.88	0.230800	2.596	2.418210	1.924	0.077059	3.329	1338.7	31.4	1248.0	13.8	1122.7	66.4	-16.1
2010-1.65	373	32	11.83	0.099792	2.943	0.763717	2.198	0.055635	4.303	613.2	17.2	576.2	9.7	437.8	95.8	-28.6
2010-1.68	442	246	1.80	0.051683	2.697	0.371366	2.476	0.053010	3.998	324.8	8.5	320.7	6.8	329.2	90.7	1.3

Spot	Concentration (ppm)			Ratios						Ages						% Discordance
	[U]	[Th]	U/Th	<sup>206</sup> Pb/ <sup>238</sup> U	2% SD	<sup>207</sup> Pb/ <sup>235</sup> U	2% SD	<sup>207</sup> Pb/ <sup>206</sup> Pb	2% SD	<sup>206</sup> Pb/ <sup>238</sup> U	± 2σ	<sup>207</sup> Pb/ <sup>235</sup> U	± 2σ	<sup>207</sup> Pb/ <sup>206</sup> Pb	± 2σ	
2010-1.70	167	81	2.06	0.165125	2.458	1.558108	1.849	0.070113	3.827	985.2	22.5	953.7	11.4	931.7	78.6	-5.4
2010-1.74	717	623	1.15	0.051469	2.604	0.382381	2.915	0.054659	4.071	323.5	8.2	328.8	8.2	398.3	91.3	23.1
2010-1.75	517	284	1.82	0.049747	2.521	0.372032	3.289	0.054740	2.957	313.0	7.7	321.2	9.1	401.6	66.2	28.3
2010-1.76	139	79	1.75	0.166779	2.114	1.601868	3.232	0.070437	2.446	994.3	19.5	970.9	20.2	941.1	50.1	-5.4
2010-1.77	442	219	2.02	0.051266	2.282	0.359203	3.298	0.051430	2.158	322.3	7.2	311.6	8.8	260.1	49.6	-19.3
2010-1.78	109	47	2.32	0.223958	2.241	2.549258	3.200	0.082928	1.944	1302.8	26.4	1286.2	23.3	1267.5	37.9	-2.7
2010-1.81	670	254	2.64	0.215748	2.229	2.570706	3.044	0.086431	1.373	1259.4	25.5	1292.3	22.3	1347.8	26.5	7.0
2010-1.83	377	205	1.84	0.051861	2.105	0.382904	3.274	0.053886	2.361	325.9	6.7	329.2	9.2	366.3	53.2	12.4
2010-1.84	119	91	1.31	0.271940	2.322	3.456849	2.846	0.092970	1.857	1550.6	32.0	1517.4	22.4	1487.3	35.2	-4.1
2010-1.85	607	372	1.63	0.053217	2.670	0.366132	4.498	0.050978	4.072	334.2	8.7	316.8	12.2	239.8	93.9	-28.2
2010-1.86	277	175	1.59	0.156443	2.566	1.431814	3.896	0.067445	3.395	937.0	22.4	902.3	23.3	851.6	70.6	-9.1
2010-1.87	393	270	1.46	0.200133	2.971	2.280530	4.277	0.082247	3.403	1176.0	31.9	1206.3	30.2	1251.4	66.6	6.4
2010-1.88	461	242	1.90	0.050493	3.134	0.357739	4.755	0.051610	3.735	317.5	9.7	310.5	12.7	268.2	85.7	-15.5
2010-1.91	264	163	1.62	0.167775	2.724	1.637549	4.333	0.070116	3.231	999.8	25.2	984.8	27.3	931.7	66.3	-6.8
2010-1.92	472	91	5.18	0.177216	3.381	1.993604	5.477	0.080474	3.528	1051.7	32.8	1113.3	37.0	1208.6	69.5	14.9
2010-1.94	629	327	1.92	0.051576	2.815	0.375302	4.981	0.052824	3.923	324.2	8.9	323.6	13.8	321.3	89.1	-0.9
2010-1.95	583	403	1.45	0.051515	2.520	0.393620	3.420	0.054131	2.834	323.8	8.0	337.0	9.8	376.5	63.8	16.3
2010-1.96	821	633	1.30	0.051332	2.493	0.378962	3.313	0.051879	2.325	322.7	7.8	326.3	9.2	280.1	53.2	-13.2
2010-1.97	167	67	2.51	0.188885	2.191	1.878702	4.426	0.071249	2.869	1115.3	22.4	1073.6	29.3	964.6	58.6	-13.5
2010-1.98	107	47	2.27	0.174783	2.150	1.774424	4.255	0.072630	3.243	1038.4	20.6	1036.1	27.6	1003.6	65.8	-3.3
2010-1.99	864	326	2.65	0.056618	2.817	0.433318	4.879	0.055127	3.053	355.0	9.7	365.5	15.0	417.4	68.2	17.6
2010-1.101	367	27	13.40	0.201634	1.803	2.159300	4.045	0.075597	2.729	1184.1	19.5	1168.0	28.1	1084.4	54.7	-8.4
2010-1.102	811	249	3.26	0.172488	2.360	1.669328	4.410	0.069413	2.611	1025.8	22.4	996.9	28.0	911.0	53.8	-11.2
2010-1.105	392	199	1.97	0.051192	2.027	0.370563	4.201	0.050833	3.267	321.8	6.4	320.1	11.5	233.3	75.4	-27.5
2010-1.107	445	278	1.60	0.051096	2.637	0.376722	3.605	0.051994	3.443	321.2	8.3	324.6	10.0	285.2	78.7	-11.2
2010-1.109	402	198	2.03	0.052028	2.479	0.382231	3.598	0.051744	3.568	327.0	7.9	328.7	10.1	274.1	81.7	-16.2
2010-1.111	543	323	1.68	0.055911	3.333	0.416664	3.778	0.052516	3.255	350.7	11.4	353.7	11.3	307.9	74.1	-12.2
2010-1.114	428	251	1.71	0.052929	2.717	0.386602	3.690	0.052261	3.350	332.5	8.8	331.9	10.4	296.8	76.4	-10.7
2010-1.115	456	258	1.77	0.051767	2.183	0.376270	2.906	0.052163	2.967	325.4	6.9	324.3	8.1	292.6	67.8	-10.1
2010-1.117	544	340	1.60	0.052634	1.923	0.374630	2.829	0.051506	2.857	330.7	6.2	323.1	7.8	263.5	65.6	-20.3
2010-1.119	313	53	5.95	0.175684	2.112	1.730281	2.250	0.071181	2.416	1043.4	20.3	1019.9	14.5	962.6	49.4	-7.7

Upper Mud Creek Tuff

2010-2.1	109	79	1.38	0.298359	2.003	4.078587	2.334	0.101474	2.018	1683.2	29.7	1650.0	19.0	1651.2	37.4	-1.9
2010-2.2	462	422	1.10	0.053428	2.255	0.384455	3.079	0.053305	2.619	335.5	7.4	330.3	8.7	341.8	59.3	1.9
2010-2.3	424	219	1.94	0.214037	2.114	2.295644	2.640	0.079183	2.344	1250.3	24.0	1210.9	18.7	1176.7	46.4	-5.9
2010-2.4	93	42	2.21	0.282533	2.601	3.642533	3.511	0.093634	2.645	1604.1	36.9	1558.9	28.0	1500.7	50.0	-6.4
2010-2.6	433	91	4.75	0.197610	2.231	2.105973	2.070	0.079203	1.804	1162.5	23.7	1150.8	14.3	1177.2	35.7	1.3
2010-2.7	291	78	3.74	0.177459	2.231	1.762347	1.991	0.072630	1.732	1053.1	21.7	1031.7	12.9	1003.7	35.2	-4.7
2010-2.8	352	395	0.89	0.285611	2.255	3.661934	1.766	0.094083	2.055	1619.6	32.3	1563.1	14.1	1509.8	38.8	-6.8
2010-2.9	810	343	2.36	0.185298	2.260	2.075968	1.932	0.082075	1.734	1095.9	22.8	1140.9	13.2	1247.3	33.9	13.8
2010-2.10	155	220	0.71	0.073495	2.117	0.569190	2.516	0.056723	2.628	457.2	9.3	457.5	9.3	480.8	58.1	5.2
2010-2.11	192	134	1.44	0.121420	6.896	1.129122	8.279	0.065571	2.757	738.7	48.1	767.3	44.6	792.7	57.8	7.3
2010-2.12	341	212	1.60	0.053639	2.067	0.384511	2.753	0.052824	2.353	336.8	6.8	330.4	7.8	321.3	53.5	-4.6
2010-2.13	1188	271	4.38	0.182436	2.165	1.842599	1.915	0.073833	1.630	1080.3	21.5	1060.8	12.6	1036.9	32.9	-4.0
2010-2.15	272	119	2.30	0.244338	3.759	3.226751	5.589	0.095438	2.413	1409.2	47.6	1463.6	43.4	1536.7	45.4	9.0
2010-2.17	385	222	1.74	0.162452	3.191	1.618574	3.236	0.072760	2.069	970.4	28.7	977.4	20.3	1007.3	42.0	3.8
2010-2.20	225	49	4.57	0.120988	2.473	1.086206	2.180	0.066257	2.334	736.3	17.2	746.7	11.5	814.5	48.8	10.6
2010-2.21	165	60	2.75	0.159250	2.410	1.569343	1.997	0.072079	2.302	952.6	21.3	958.2	12.4	988.2	46.8	3.7
2010-2.22	827	283	2.93	0.197893	2.439	2.363451	2.121	0.086766	2.080	1164.0	26.0	1231.6	15.1	1355.3	40.1	16.4
2010-2.23	527	264	1.99	0.188938	2.514	2.071671	2.396	0.079407	2.075	1115.6	25.8	1139.5	16.4	1182.3	41.0	6.0
2010-2.24	453	280	1.62	0.050502	2.429	0.381021	2.409	0.054795	2.600	317.6	7.5	327.8	6.7	403.9	58.2	27.2
2010-2.25	196	84	2.34	0.248048	3.345	3.494277	4.677	0.101435	2.925	1428.4	42.9	1525.9	36.9	1650.5	54.2	15.6
2010-2.26	234	100	2.33	0.188264	2.556	2.166522	2.361	0.083247	2.012	1112.0	26.1	1170.4	16.4	1275.0	39.2	14.7
2010-2.27	182	74	2.45	0.339508	2.258	5.434874	1.907	0.116776	1.628	1884.3	36.9	1890.4	16.4	1907.5	29.2	1.2

Spot	Concentration (ppm)			Ratios						Ages						% Discordance
	[U]	[Th]	U/Th	<sup>206</sup> Pb/ <sup>238</sup> U	2% SD	<sup>207</sup> Pb/ <sup>235</sup> U	2% SD	<sup>207</sup> Pb/ <sup>206</sup> Pb	2% SD	<sup>206</sup> Pb/ <sup>238</sup> U	± 2σ	<sup>207</sup> Pb/ <sup>235</sup> U	± 2σ	<sup>207</sup> Pb/ <sup>206</sup> Pb	± 2σ	
2010-2.28	294	43	6.79	0.204744	3.072	2.534011	2.926	0.089902	2.157	1200.8	33.7	1281.9	21.3	1423.4	41.2	18.5
20102-.29	97	38	2.58	0.241141	3.543	2.958714	3.180	0.089935	1.925	1392.6	44.4	1397.1	24.1	1424.1	36.8	2.3
2010-2.30	266	148	1.80	0.051045	3.588	0.374930	3.517	0.054407	2.366	320.9	11.2	323.3	9.7	387.9	53.1	20.9
2010-2.31	145	70	2.07	0.049600	3.631	0.370446	3.476	0.054193	2.174	312.1	11.1	320.0	9.5	379.1	48.9	21.5
2010-2.32	408	394	1.04	0.052842	3.813	0.384217	3.492	0.052615	1.963	331.9	12.3	330.1	9.8	312.2	44.7	-5.9
2010-2.33	500	263	1.90	0.174241	3.475	1.864545	2.948	0.077782	1.965	1035.4	33.2	1068.6	19.5	1141.3	39.1	10.2
2010-2.34	131	66	2.00	0.051888	3.561	0.388286	3.269	0.054357	1.953	326.1	11.3	333.1	9.3	385.9	43.9	18.3
2010-2.36	976	90	10.88	0.097882	3.190	0.847914	3.741	0.063225	3.350	602.0	18.3	623.5	17.4	715.8	71.1	18.9
2010-2.38	619	449	1.38	0.050678	4.118	0.385689	3.664	0.054636	2.365	318.7	12.8	331.2	10.4	397.3	53.0	24.7
2010-2.39	324	216	1.50	0.168818	2.627	1.710586	2.165	0.073559	1.722	1005.6	24.5	1012.5	13.9	1029.4	34.8	2.4
2010-2.40	462	232	1.99	0.242206	2.242	3.029730	1.957	0.091627	2.079	1398.2	28.2	1415.1	14.9	1459.7	39.5	4.4
2010-2.41	174	85	2.06	0.051040	2.456	0.375189	2.589	0.053875	2.321	320.9	7.7	323.5	7.2	365.8	52.3	14.0
2010-2.42	186	93	1.99	0.193662	2.608	2.109691	2.343	0.079030	1.771	1141.2	27.3	1152.0	16.1	1172.9	35.0	2.8
2010-2.43	337	200	1.69	0.364661	2.425	6.567719	2.006	0.132320	1.647	2004.2	41.8	2055.0	17.7	2129.0	28.8	6.2
2010-2.44	495	271	1.82	0.206864	2.382	2.377205	2.008	0.082728	1.660	1212.1	26.3	1235.8	14.4	1262.8	32.4	4.2
2010-2.45	902	81	11.15	0.196058	2.311	2.107851	2.294	0.078322	1.657	1154.1	24.4	1151.4	15.8	1155.0	32.9	0.1
2010-2.47	1200	149	8.07	0.065475	2.159	0.499501	1.920	0.056121	1.720	408.8	8.6	411.4	6.5	457.2	38.2	11.8
2010-2.48	405	412	0.98	0.051079	1.958	0.374445	2.730	0.053863	2.346	321.1	6.1	322.9	7.6	365.3	52.9	13.8
2010-2.49	916	235	3.89	0.230760	1.961	2.824532	2.667	0.088507	1.776	1338.5	23.7	1362.1	20.0	1393.5	34.1	4.1
2010-2.51	1017	101	10.09	0.188491	2.452	2.138899	3.553	0.083267	2.484	1113.2	25.1	1161.5	24.6	1275.5	48.4	14.6
2010-2.52	165	66	2.49	0.262486	1.881	3.338101	2.648	0.093202	1.439	1502.6	25.2	1490.0	20.7	1492.0	27.2	-0.7
2010-2.54	204	82	2.49	0.158443	1.855	1.647046	2.363	0.076031	1.535	948.1	16.4	988.4	14.9	1095.9	30.7	15.6
2010-2.55	380	363	1.05	0.162448	1.897	1.640807	2.262	0.073544	1.822	970.4	17.1	986.0	14.3	1029.0	36.8	6.0
2010-2.56	164	82	2.01	0.214297	1.794	2.487241	1.707	0.084731	1.383	1251.7	20.4	1268.3	12.4	1309.4	26.8	4.6
2010-2.57	1319	156	8.46	0.100503	2.136	0.845450	2.146	0.060900	1.509	617.4	12.6	622.1	10.0	635.7	32.5	3.0
2010-2.58	1366	160	8.55	0.166644	2.150	1.630895	1.732	0.071569	1.409	993.6	19.8	982.2	10.9	973.7	28.7	-2.0
2010-2.60	779	814	0.96	0.212452	2.371	2.441568	2.161	0.083739	1.557	1241.9	26.8	1254.9	15.6	1286.5	30.3	3.6
2010-2.63	177	98	1.80	0.232897	2.442	2.872202	2.152	0.089999	1.789	1349.7	29.7	1374.6	16.2	1425.5	34.2	5.6
2010-2.65	102	457	0.22	0.176165	2.484	1.762260	1.899	0.072969	1.448	1046.0	24.0	1031.7	12.3	1013.1	29.4	-3.1
2010-2.66	156	103	1.52	0.290495	2.141	4.249973	1.682	0.107279	1.134	1644.0	31.1	1683.7	13.8	1753.7	20.8	6.7
2010-2.67	635	199	3.19	0.170842	2.318	1.745725	2.177	0.074985	1.260	1016.7	21.8	1025.6	14.1	1068.1	25.3	5.1
2010-2.68	309	111	2.78	0.235752	2.671	2.536611	2.692	0.079512	2.200	1364.6	32.9	1282.6	19.6	1184.9	43.5	-13.2
2010-2.69	976	93	10.46	0.051841	2.139	0.381792	2.692	0.054796	1.692	325.8	6.8	328.4	7.6	403.9	37.9	24.0
2010-2.71	595	497	1.20	0.175198	2.179	1.805822	2.805	0.075222	2.121	1040.7	20.9	1047.6	18.3	1074.4	42.6	3.2
2010-2.72	1316	134	9.81	0.241521	1.780	2.858276	1.954	0.087281	1.401	1394.6	22.3	1371.0	14.7	1366.7	27.0	-2.0
2010-2.74	272	194	1.40	0.051684	1.960	0.379476	2.274	0.053180	1.879	324.9	6.2	326.7	6.4	336.5	42.6	3.6
2010-2.76	699	491	1.43	0.072251	2.032	0.561023	2.123	0.056644	1.772	449.7	8.8	452.2	7.7	477.7	39.2	6.2
2010-2.77	455	263	1.73	0.182804	2.009	1.798993	2.185	0.072391	1.569	1082.3	20.0	1045.1	14.3	997.0	31.9	-7.9
2010-2.78	322	198	1.63	0.166063	2.033	1.682289	1.782	0.074553	1.310	990.4	18.7	1001.8	11.4	1056.5	26.4	6.7
2010-2.79	1251	127	9.86	0.311052	2.017	4.738017	1.934	0.110992	1.202	1745.9	30.9	1774.0	16.2	1815.7	21.8	4.0
2010-2.80	1239	126	9.82	0.262087	1.934	3.427181	1.982	0.096537	1.410	1500.5	25.9	1510.6	15.6	1558.2	26.4	3.8
2010-2.81	291	118	2.46	0.053000	2.400	0.395577	2.644	0.054178	1.851	332.9	7.8	338.4	7.6	378.4	41.6	13.7
2010-2.82	1281	131	9.75	0.229480	4.694	2.601044	5.985	0.081018	1.981	1331.8	56.5	1300.9	43.9	1221.9	38.9	-8.3
2010-2.83	1625	238	6.84	0.163907	2.207	1.628061	2.373	0.072390	1.508	978.5	20.0	981.1	14.9	996.9	30.6	1.9
2010-2.84	180	102	1.76	0.516695	2.605	13.055840	2.574	0.186069	1.256	2685.1	57.2	2683.7	24.3	2707.7	20.7	0.8
2010-2.86	743	44	16.82	0.261041	3.069	3.529056	3.482	0.098105	1.888	1495.2	41.0	1533.7	27.6	1588.4	35.3	6.2
2010-2.87	287	78	3.68	0.248209	2.036	3.189984	2.081	0.094104	1.304	1429.2	26.1	1454.7	16.1	1510.2	24.6	5.7
2010-2.89	311	206	1.51	0.208411	2.159	2.344511	1.951	0.082058	1.340	1220.3	24.0	1225.9	13.9	1246.9	26.2	2.2
2010-2.92	1167	43	26.88	0.051378	1.882	0.382554	2.254	0.054520	1.919	323.0	5.9	328.9	6.3	392.6	43.0	21.5
2010-2.96	168	101	1.67	0.226160	4.193	2.512196	3.896	0.081369	1.491	1314.3	49.9	1275.6	28.3	1230.4	29.3	-6.4
2010-2.97	434	287	1.51	0.251316	3.323	3.179189	2.881	0.091686	1.581	1445.3	43.0	1452.1	22.3	1460.9	30.0	1.1
2010-2.98	288	168	1.72	0.093915	4.649	0.789266	4.455	0.060395	2.425	578.7	25.7	590.8	20.0	617.8	52.3	6.8
2010-2.99	183	108	1.69	0.052788	6.028	0.386062	5.075	0.053542	3.153	331.6	19.5	331.5	14.4	351.8	71.2	6.1
2010-2.101	362	125	2.90	0.052002	6.045	0.380138	4.663	0.053285	2.847	326.8	19.3	327.1	13.0	340.9	64.4	4.3

Spot	Concentration (ppm)			Ratios						Ages						% Discordance
	[U]	[Th]	U/Th	<sup>206</sup> Pb/ <sup>238</sup> U	2% SD	<sup>207</sup> Pb/ <sup>235</sup> U	2% SD	<sup>207</sup> Pb/ <sup>206</sup> Pb	2% SD	<sup>206</sup> Pb/ <sup>238</sup> U	± 2σ	<sup>207</sup> Pb/ <sup>235</sup> U	± 2σ	<sup>207</sup> Pb/ <sup>206</sup> Pb	± 2σ	
2010-2.102	338	126	2.69	0.203841	6.003	2.277417	4.367	0.080704	2.782	1195.9	65.5	1205.3	30.8	1214.2	54.7	1.5
2010-2.104	256	162	1.58	0.186330	6.035	1.896271	4.423	0.074203	2.410	1101.5	61.1	1079.8	29.4	1047.0	48.6	-4.9
2010-2.105	1463	1037	1.41	0.294276	4.531	4.377117	4.105	0.108007	1.750	1662.9	66.4	1708.0	33.9	1766.1	32.0	6.2
2010-2.106	126	58	2.15	0.052464	3.536	0.381795	3.697	0.052524	2.384	329.6	11.4	328.4	10.4	308.3	54.3	-6.5
2010-2.107	119	57	2.11	0.180251	3.473	1.850145	3.270	0.074592	1.963	1068.3	34.2	1063.5	21.6	1057.5	39.5	-1.0
2010-2.108	316	162	1.95	0.555050	2.471	15.982479	2.588	0.207821	1.473	2846.1	56.8	2875.7	24.7	2888.6	23.9	1.5
2010-2.109	107	50	2.11	0.381791	3.042	6.438378	3.682	0.122808	1.866	2084.6	54.2	2037.5	32.4	1997.4	33.2	-4.2
2010-2.110	420	248	1.69	0.182286	2.943	1.861879	3.635	0.074298	2.685	1079.5	29.3	1067.7	24.0	1049.6	54.1	-2.8
2010-2.111	251	167	1.50	0.340371	2.643	5.275278	3.280	0.113763	2.045	1888.5	43.3	1864.9	28.0	1860.4	36.9	-1.5
2010-2.112	227	100	2.26	0.093044	2.716	0.757695	3.478	0.059120	2.235	573.5	14.9	572.7	15.2	571.5	48.6	-0.4
2010-2.113	395	211	1.87	0.237607	2.701	2.871878	3.348	0.087601	2.013	1374.2	33.4	1374.6	25.2	1373.7	38.7	0.0
2010-2.114	303	143	2.12	0.053110	2.726	0.388445	3.828	0.052522	2.753	333.6	8.9	333.2	10.9	308.2	62.7	-7.6
2010-2.115	63	64	0.98	0.052400	2.947	0.385950	3.295	0.052843	2.289	329.2	9.5	331.4	9.3	322.1	52.0	-2.2
2010-2.116	173	98	1.77	0.264413	2.895	3.533921	2.399	0.096887	1.875	1512.4	39.0	1534.8	19.0	1565.0	35.1	3.5
2010-2.117	161	92	1.75	0.167195	2.585	1.729462	2.474	0.073814	1.824	996.6	23.9	1019.6	15.9	1036.4	36.8	4.0
2010-2.118	125	110	1.13	0.244959	2.752	3.129408	2.331	0.091549	2.158	1412.4	34.9	1439.9	17.9	1458.0	41.0	3.2
2010-2.119	200	106	1.89	0.188620	2.120	2.013769	2.552	0.076849	1.469	1113.9	21.7	1120.2	17.3	1117.3	29.3	0.3
2010-2.120	122	79	1.55	0.225584	2.289	2.789867	2.977	0.087794	2.033	1311.3	27.2	1352.8	22.3	1378.0	39.1	5.1

Chickasaw Creek Tuff

2011-1.1	280	250	1.12	0.085122	2.237	0.710505	2.750	0.061044	2.355	526.6	11.3	545.0	11.6	640.8	50.6	21.7
2011-1.3	631	575	1.10	0.053522	2.595	0.402344	3.112	0.054230	2.454	336.1	8.5	343.3	9.1	380.6	55.2	13.2
2011-1.4	337	179	1.88	0.174161	2.401	1.783326	2.622	0.073720	1.708	1035.0	23.0	1039.4	17.1	1033.8	34.5	-0.1
2011-1.5	506	346	1.46	0.051274	2.150	0.388072	2.527	0.053615	1.955	322.3	6.8	333.0	7.2	354.9	44.2	10.1
2011-1.7	867	796	1.09	0.049140	2.164	0.364834	2.388	0.053369	2.016	309.2	6.5	315.8	6.5	344.5	45.6	11.4
2011-1.11	118	51	2.29	0.171445	2.209	1.787159	2.278	0.075915	2.303	1020.1	20.8	1040.8	14.8	1092.8	46.1	7.1
2011-1.12	141	76	1.87	0.256799	2.313	3.403341	2.463	0.095185	2.070	1473.4	30.5	1505.2	19.3	1531.7	39.0	4.0
2011-1.13	503	325	1.55	0.162605	3.204	1.776061	3.502	0.078839	1.780	971.2	28.9	1036.7	22.8	1168.1	35.3	20.3
2011-1.15	967	840	1.15	0.049722	2.180	0.364527	2.548	0.053250	2.158	312.8	6.7	315.6	6.9	339.5	48.9	8.5
2011-1.17	206	106	1.94	0.206469	2.113	2.325689	2.031	0.080550	1.926	1210.0	23.3	1220.2	14.4	1210.5	37.9	0.0
2011-1.18	550	337	1.63	0.050610	2.357	0.377526	2.695	0.053937	1.948	318.3	7.3	325.2	7.5	368.4	43.9	15.8
2011-1.19	275	81	3.41	0.213535	2.346	2.368810	2.489	0.081071	1.911	1247.6	26.6	1233.2	17.8	1223.2	37.6	-2.0
2011-1.21	144	88	1.64	0.168701	1.941	1.700245	3.386	0.073284	2.436	1004.9	18.1	1008.6	21.7	1021.8	49.3	1.7
2011-1.25	349	181	1.93	0.275084	2.483	3.721292	2.784	0.097249	1.643	1566.6	34.5	1576.0	22.3	1572.0	30.8	0.3
2011-1.26	390	142	2.75	0.081586	2.337	0.641907	2.867	0.058054	1.883	505.6	11.4	503.5	11.4	531.8	41.2	5.2
2011-1.27	90	50	1.79	0.192508	1.941	2.180613	3.089	0.081961	2.086	1134.9	20.2	1174.9	21.5	1244.6	40.9	9.7
2011-1.29	463	288	1.61	0.183427	2.249	1.871927	2.794	0.073743	1.755	1085.7	22.5	1071.2	18.5	1034.4	35.5	-4.7
2011-1.30	312	307	1.01	0.053211	2.519	0.398762	3.131	0.055284	2.050	334.2	8.2	340.8	9.1	423.7	45.7	26.8
2011-1.31	394	171	2.31	0.264564	2.548	3.464804	2.703	0.097202	1.825	1513.1	34.4	1519.2	21.3	1571.1	34.2	3.8
2011-1.32	175	52	3.34	0.113004	2.894	0.960242	3.746	0.062743	2.006	690.2	18.9	683.4	18.6	699.5	42.7	1.4
2011-1.34	475	299	1.59	0.051110	2.464	0.385905	2.743	0.055012	1.917	321.3	7.7	331.4	7.8	412.7	42.9	28.4
2011-1.35	396	768	0.52	0.459283	2.374	10.345284	2.226	0.164535	1.651	2436.4	48.2	2466.2	20.6	2502.8	27.8	2.7
2011-1.39	474	340	1.39	0.050575	2.288	0.383320	3.002	0.054913	2.175	318.0	7.1	329.5	8.4	408.7	48.7	28.5
2011-1.40	319	275	1.16	0.052574	2.186	0.391916	2.838	0.054649	2.411	330.3	7.0	335.8	8.1	397.9	54.0	20.5
2011-1.42	491	206	2.38	0.164980	2.410	1.661395	3.079	0.073579	2.199	984.4	22.0	993.9	19.5	1030.0	44.5	4.6
2011-1.45	235	170	1.38	0.266721	2.458	3.409634	2.665	0.093647	1.962	1524.1	33.4	1506.6	20.9	1501.0	37.1	-1.5
2011-1.46	167	31	5.43	0.083637	2.369	0.699523	3.162	0.060783	2.404	517.8	11.8	538.5	13.2	631.6	51.8	22.0
2011-1.48	216	166	1.30	0.200644	2.140	2.222921	2.639	0.080603	1.989	1178.8	23.1	1188.3	18.5	1211.8	39.1	2.8
2011-1.49	360	269	1.34	0.051731	2.683	0.385769	3.457	0.054605	2.420	325.1	8.5	331.3	9.8	396.1	54.3	21.8
2011-1.50	113	52	2.16	0.167982	2.491	1.680509	2.687	0.073863	2.159	1001.0	23.1	1001.2	17.1	1037.7	43.6	3.7
2011-1.51	195	73	2.68	0.173977	2.768	1.723472	2.888	0.072539	1.961	1034.0	26.4	1017.3	18.6	1001.1	39.8	-3.2
2011-1.54	67	81	0.83	0.089088	2.940	0.760785	3.152	0.062617	3.056	550.1	15.5	574.5	13.8	695.3	65.1	26.4
2011-1.56	418	262	1.60	0.052674	2.716	0.388949	3.501	0.053700	2.373	330.9	8.8	333.6	10.0	358.5	53.6	8.3
2011-1.58	305	244	1.25	0.307249	2.525	4.525817	2.417	0.107768	1.862	1727.2	38.3	1735.7	20.1	1762.0	34.0	2.0
2011-1.60	855	887	0.96	0.051008	2.678	0.369820	2.628	0.053404	1.980	320.7	8.4	319.5	7.2	346.0	44.8	7.9

Spot	Concentration (ppm)			Ratios						Ages						% Discordance
	[U]	[Th]	U/Th	<sup>206</sup> Pb/ <sup>238</sup> U	2% SD	<sup>207</sup> Pb/ <sup>235</sup> U	2% SD	<sup>207</sup> Pb/ <sup>206</sup> Pb	2% SD	<sup>206</sup> Pb/ <sup>238</sup> U	± 2σ	<sup>207</sup> Pb/ <sup>235</sup> U	± 2σ	<sup>207</sup> Pb/ <sup>206</sup> Pb	± 2σ	
2011-1.63	652	116	5.63	0.242600	2.900	3.520934	2.946	0.106340	1.517	1400.2	36.5	1531.9	23.3	1737.6	27.8	24.1
2011-1.64	824	617	1.34	0.049990	2.305	0.367739	2.485	0.054278	1.661	314.5	7.1	318.0	6.8	382.6	37.3	21.7
2011-1.65	99	109	0.91	0.192688	2.076	2.075178	2.246	0.079737	1.752	1135.9	21.6	1140.6	15.4	1190.5	34.6	4.8
2011-1.66	269	139	1.94	0.165514	2.251	1.628782	2.742	0.072845	1.875	987.3	20.6	981.4	17.3	1009.6	38.0	2.3
2011-1.67	410	272	1.51	0.051943	2.750	0.377633	3.009	0.054024	1.949	326.4	8.8	325.3	8.4	372.1	43.9	14.0
2011-1.68	129	62	2.09	0.202642	1.886	2.271804	2.235	0.082216	1.650	1189.5	20.5	1203.6	15.8	1250.7	32.3	5.1
2011-1.69	579	325	1.78	0.092925	2.317	0.750909	2.291	0.059779	1.562	572.8	12.7	568.8	10.0	595.6	33.9	4.0
2011-1.70	564	425	1.33	0.052430	2.656	0.374430	2.732	0.052643	1.899	329.4	8.5	322.9	7.6	313.4	43.2	-4.9
2011-1.72	513	377	1.36	0.051019	2.222	0.371816	2.496	0.053437	1.898	320.8	7.0	321.0	6.9	347.4	42.9	8.3
2011-1.73	1912	196	9.75	0.155761	2.235	1.478197	2.115	0.069982	1.592	933.2	19.4	921.5	12.8	927.8	32.7	-0.6
2011-1.74	296	106	2.79	0.169083	2.296	1.654218	2.413	0.072319	1.672	1007.1	21.4	991.2	15.3	994.9	34.0	-1.2
2011-1.75	530	384	1.38	0.053319	2.845	0.386384	2.900	0.053314	2.082	334.9	9.3	331.7	8.2	342.2	47.1	2.2
2011-1.76	106	46	2.31	0.159432	2.153	1.620896	2.384	0.074755	1.648	953.6	19.1	978.3	15.0	1061.9	33.2	11.4
2011-1.77	407	204	2.00	0.051803	2.530	0.372417	2.863	0.053423	1.994	325.6	8.0	321.4	7.9	346.8	45.1	6.5
2011-1.79	947	117	8.13	0.101298	2.197	0.835521	2.464	0.061711	1.750	622.0	13.0	616.7	11.4	664.1	37.5	6.8
2011-1.80	489	470	1.04	0.082061	2.432	0.645552	2.607	0.058117	1.835	508.4	11.9	505.7	10.4	534.2	40.2	5.1
2011-1.81	195	75	2.62	0.189140	1.827	1.937158	1.648	0.075336	1.234	1116.7	18.7	1094.0	11.0	1077.5	24.8	-3.5
2011-1.82	90	80	1.12	0.077851	2.576	0.640935	2.730	0.060583	2.888	483.3	12.0	502.9	10.8	624.4	62.3	29.2
2011-1.83	104	66	1.58	0.086798	2.078	0.715632	2.748	0.060466	2.872	536.6	10.7	548.1	11.6	620.3	62.0	15.6
2011-1.85	288	155	1.86	0.052070	2.718	0.377258	2.914	0.052816	1.939	327.2	8.7	325.0	8.1	320.9	44.1	-1.9
2011-1.86	410	240	1.70	0.049013	2.351	0.364986	2.515	0.054186	1.818	308.5	7.1	315.9	6.8	378.8	40.9	22.8
2011-1.87	569	411	1.39	0.051284	2.258	0.374199	2.130	0.053625	1.654	322.4	7.1	322.8	5.9	355.3	37.4	10.2
2011-1.90	331	237	1.40	0.053016	2.674	0.389688	2.788	0.053640	2.089	333.0	8.7	334.1	7.9	356.0	47.2	6.9
2011-1.91	372	148	2.52	0.172973	2.699	1.788051	1.951	0.075089	1.552	1028.5	25.7	1041.1	12.7	1070.9	31.2	4.1
2011-1.92	375	217	1.73	0.050419	2.307	0.371630	2.525	0.054444	1.946	317.1	7.1	320.9	6.9	389.5	43.7	22.8
2011-1.93	352	50	7.02	0.112408	2.702	0.920808	2.645	0.059752	1.658	686.7	17.6	662.8	12.9	594.6	35.9	-13.4
2011-1.95	165	162	1.02	0.052077	2.488	0.395225	3.041	0.054389	2.427	327.3	7.9	338.2	8.7	387.2	54.5	18.3
2011-1.99	707	732	0.97	0.052241	2.396	0.381338	1.995	0.053816	1.682	328.3	7.7	328.0	5.6	363.4	37.9	10.7
2011-1.100	542	407	1.33	0.049754	2.621	0.360485	2.347	0.053420	1.808	313.0	8.0	312.6	6.3	346.7	40.9	10.8
2011-1.101	614	327	1.88	0.051135	2.314	0.369494	2.153	0.053730	1.593	321.5	7.3	319.3	5.9	359.8	35.9	11.9
2011-1.102	1208	1103	1.10	0.049770	2.299	0.372100	2.106	0.054848	1.541	313.1	7.0	321.2	5.8	406.0	34.5	29.7
2011-1.103	205	109	1.88	0.050983	2.183	0.366269	2.875	0.053176	2.602	320.6	6.8	316.9	7.8	336.3	59.0	4.9
2011-1.106	333	248	1.35	0.051163	2.628	0.375898	2.565	0.054037	1.949	321.7	8.2	324.0	7.1	372.6	43.9	15.8
2011-1.107	334	241	1.39	0.051864	2.699	0.374912	3.084	0.053167	2.087	326.0	8.6	323.3	8.5	335.9	47.3	3.1
2011-1.109	429	220	1.95	0.051984	2.891	0.382723	2.979	0.054093	1.828	326.7	9.2	329.0	8.4	374.9	41.1	14.8
2011-1.111	455	380	1.20	0.052351	2.826	0.386050	3.368	0.053825	2.278	328.9	9.1	331.5	9.5	363.7	51.4	10.6
2011-1.112	183	107	1.70	0.453536	1.948	11.160191	1.731	0.179393	1.604	2411.0	39.2	2536.6	16.1	2647.3	26.6	9.8
2011-1.113	424	230	1.84	0.048731	2.258	0.361488	2.394	0.054183	2.075	306.7	6.8	313.3	6.5	378.7	46.7	23.5
2011-1.114	171	167	1.03	0.083284	2.027	0.687869	3.254	0.059946	3.014	515.7	10.0	531.5	13.5	601.6	65.2	16.7
2011-1.115	291	183	1.59	0.050249	2.534	0.369668	2.451	0.053984	2.110	316.0	7.8	319.4	6.7	370.4	47.5	17.2
2011-1.118	486	426	1.14	0.049828	1.937	0.373221	2.161	0.053887	1.874	313.5	5.9	322.0	6.0	366.3	42.2	16.9
2011-1.119	465	289	1.61	0.049114	2.026	0.363076	2.199	0.053338	1.848	309.1	6.1	314.5	5.9	343.2	41.8	11.0